



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,187	10/16/2000	Tatsuya Seshimo	Q61335	8574

7590

08/06/2003

Sughrue Mion Zinn Macpeak & Seas PLLC  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3213

EXAMINER

HUFFMAN, JULIAN D

ART UNIT PAPER NUMBER

2853

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/688,187

Applicant(s)

SESHIMO ET AL.

Examiner

Julian D. Huffman

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-14 and 16-33 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 15 the method steps may be executed in any order since no order is recited, thus the limitation "always awaiting input of an instruction by a user before executing a subsequent printing operation" is not supported by the specification. The specification only requires user input for continuing a printing operation if compatibility cannot be determined.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2853

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 2 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Cook (U.S. 6,155,664).

Cook discloses an ink jet recording apparatus comprising an ink jet recording head (element 2) for receiving supply of ink from an ink cartridge (element 8) provided with storage means (element 14) for storing data for determining compatibility of a recording apparatus, and control means (36) for determining compatibility of ink when the head is to be filled with ink after it is mounted (column 7, lines 40-44 and column 8, lines 1-6), based on the data in the storage means and executing print operation, wherein:

if compatibility to an ink cartridge cannot be confirmed when the ink cartridge is mounted, the recording apparatus generates a caution and always awaits input of an instruction by a user before the recording apparatus executes a subsequent print operation (fig. 3, column 8, lines 46-50).

With regards to claim 15, Cook discloses a method of determining compatibility of ink based on data stored in storage means of an ink cartridge for supplying ink to a recording head of an ink jet recording apparatus, the method comprising:

generating a caution if compatibility to an ink cartridge cannot be confirmed when the ink cartridge is mounted; and

always awaiting input of an instruction by a user before executing a subsequent printing operation (fig. 3, column 8, lines 46-50).

With regards to claim 2, Cook discloses that the compatibility check may be performed when a refilling operation is initiated (column 8, lines 1-3). Cook also teaches that periodic refilling of the printhead is performed after the initial supply in the printhead's reservoir is depleted (column 1, lines 29-34). Since periodic refilling will occur after the printhead's reservoir becomes substantially depleted, and a compatibility check is performed when a refilling operation is initiated, Cook teaches the invention of claim 2.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook in view of Myung (U.S. 6,217,144 B1).

Cook discloses everything claimed, as discussed above, with the exception of moving the ink cartridge to an ink cartridge replacement position if a cartridge replacement instruction is entered.

Art Unit: 2853

Myung discloses that it is known in the art to move a cartridge to a replacement position when a user pushes a key for cartridge replacement (column 5, lines 35-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Cook in accordance with this teaching of Myung. The reason for performing the modification would have been to facilitate replacement of an ink cartridge by moving it to a location which is accessible to the user.

### ***Response to Arguments***

7. Applicant's argument that Cook does not disclose "that if compatibility to an ink cartridge cannot be confirmed when the ink cartridge is mounted, the recording apparatus generates a caution and always awaits input of an instruction by a user before the recording apparatus executes a subsequent printing operation" has been considered and is respectfully not found persuasive. In fig. 3, step 70, the cartridge may substantially fail a compatibility test and printing operations are stopped at 75. Printing operations do not continue in this case. The only case where printing operations continue is the break and return to idle state from the subroutine of steps 70, 72 and 74, and this break is only achieved if the user inputs a continuation instruction after a marginal failure of the compatibility test. There is no way for control to return to the idle state without first passing block 72 which requires a continuation instruction of a user, thus in Cook, the recording apparatus always awaits input of an instruction by a user before executing a subsequent printing operation.

Art Unit: 2853

The rejection of claims 4-6, 16 and 17 is withdrawn. While the examiner does not agree with all of applicant's arguments, the examiner agrees that Keeling suggests using default values if the user does not enter the cartridge code using the keyboard, since Keeling uses the language "if a new print head is fitted to the printer, and the calibration values for the new print head are not *entered* into the logic system" (column 11, lines 60-67). Cook does not use a keyboard to enter a code, rather a memory is used, and while Keeling teaches storing the code in a memory, Keeling does not suggest using default values if they cannot be read from a memory. Additionally, the references suggest no relationship between determining an incompatible ink cartridge and using default values, while applicant's claim language places them in a conditional relationship whereupon if an incompatible cartridge is determined, default values are used.

***Allowable Subject Matter***

8. Claims 4-14 and 16-33 are allowed.

With regards to claims 4-8, 16, 17, 20 and 27 the prior art of record does not disclose using default values or general purpose values if the compatibility of the cartridge is not confirmed.

With regards to claims 9-14, 18, 19, 21-26 and 28-33 the prior art of record does not disclose outputting data used as a guide for determining a compatible ink cartridge if the cartridge is found to be incompatible. Benjamin et al. disclose outputting data used

Art Unit: 2853

as a guide for purchasing a replacement ink cartridge (column 4, lines 20-39), however, Benjamin et al. do not teach outputting the data if compatibility cannot be confirmed.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. 6,113,208 to Benjamin et al.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (703) 308-6556. The examiner can generally be reached Monday through Friday from 9:00 a.m. to 5:30 p.m.



Art Unit: 2853

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, can be reached at (703) 308-4896. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722. Faxes requiring the immediate attention of the examiner may be sent directly to the examiner at (703) 746-4386. Note that this number will not automatically send a confirmation that the fax was received.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JH

18 July 2003



Stephen D. Meier  
Primary Examiner